



# 11

1

SEQUENCE LISTING

<110> MUNROE, DONALD G.  
KAMBOJ, RAJENDER  
PETERS, DIANA  
KOOSHESH, FATEMEH  
VYAS, TEJAL B.  
GUPTA, ASHWANI K.

<120> AN ISOLATED HUMAN EDG-4 RECEPTOR

<130> 108074-00023

<140> 10/084,507  
<141> 2002-02-28

<150> 09/222,995  
<151> 1998-12-30

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primer

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<210> 3  
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AUG 20 2002

TECH CENTER 1600/2900

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<223> Description of Artificial Sequence: synthetic primer

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primer

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33

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<212> DNA

<213> Homo sapiens

<400> 13

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ggagacgacc	tcccgcagg	tggcctcggc	attcatcgtc	atcctctgtt	gcgccattgt	180
ggtggaaaac	cttctggtgc	tcattgcggt	ggcccgaaac	agcaagttcc	actcggcaat	240
gtacctgttt	ctgggcaacc	tggcgcctc	cgatctactg	gcaggcggtg	ccttcgtagc	300
caataccttg	ctctctggct	ctgtcacgct	gaggctgacg	cctgtgcagt	ggtttgccc	360
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gagcgccacg	tggccattgc	aaagg				445

<210> 14

<211> 364

<212> DNA

<213> Homo sapiens

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ggagacgacc	tcccgcagg	tggcctcggc	cttcatcgtc	atcctctgtt	gcgccattgt	180
ggtggaaaac	cttctggtgc	tcattgcggt	ggcccgaaac	agcaagttcc	actcggcaat	240
gtacctgttt	ctgggcaacc	tggcgcctc	cgatctactg	gcaggcggtg	ccttcgtagc	300
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ggac						364

<210> 15

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<212> DNA

<213> Homo sapiens

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aaacgcagga	gacgacctcc	cgccagggtg	gctcggcctt	catcgctcgc	ctctgttgctg	180
ccattgtggt	ggaaaacctt	ctggtgctca	ttgcggtggc	ccgaaacagc	aagttccact	240
cggcaatgta	cctgtttctg	ggcaacctgg	ccgcctccga	tctactggca	ggcgtggctt	300
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<222> (273)
<223> Leu or Phe

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gag	tac	ctg	aac	ccc	aac	aag	gtc	cag	gaa	cac	tat	aat	tat	acc	aag	103	
Glu	Tyr	Leu	Asn	Pro	Asn	Lys	Val	Gln	Glu	His	Tyr	Asn	Tyr	Thr	Lys		
			10					15					20				
gag	acg	ctg	gaa	acg	cag	gag	acg	acc	tcc	cgc	cag	gtg	gcc	tcg	gcc	151	
Glu	Thr	Leu	Glu	Thr	Gln	Glu	Thr	Thr	Ser	Arg	Gln	Val	Ala	Ser	Ala		
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ttc	atc	gtc	atc	ctc	tgt	tgc	gcc	att	gtg	gtg	gaa	aac	ctt	ctg	gtg	199	
Phe	Ile	Val	Ile	Leu	Cys	Cys	Ala	Ile	Val	Val	Glu	Asn	Leu	Leu	Val		
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ctc	att	gcg	gtg	gcc	cga	aac	agc	aag	ttc	cac	tcg	gca	atg	tac	ctg	247	
Leu	Ile	Ala	Val	Ala	Arg	Asn	Ser	Lys	Phe	His	Ser	Ala	Met	Tyr	Leu		
55					60					65					70		
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Phe	Leu	Gly	Asn	Leu	Ala	Ala	Ser	Asp	Leu	Leu	Ala	Gly	Val	Ala	Phe		
				75					80					85			
gta	gcc	aat	acc	ttg	ctc	tct	ggc	tct	gtc	acg	ctg	agg	ctg	acg	cct	343	
Val	Ala	Asn	Thr	Leu	Leu	Ser	Gly	Ser	Val	Thr	Leu	Arg	Leu	Thr	Pro		
			90					95					100				
gtg	cag	tgg	ttt	gcc	cgg	gag	ggc	tct	gcc	ttc	atc	acg	ctc	tcg	gcc	391	
Val	Gln	Trp	Phe	Ala	Arg	Glu	Gly	Ser	Ala	Phe	Ile	Thr	Leu	Ser	Ala		
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tct	gtc	ttc	agc	ctc	ctg	gcc	atc	gcc	att	gag	cgc	cac	gtg	gcc	att	439	
Ser	Val	Phe	Ser	Leu	Leu	Ala	Ile	Ala	Ile	Glu	Arg	His	Val	Ala	Ile		
	120					125					130						
gcc	aag	gtc	aag	ctg	tat	ggc	agc	gac	aag	agc	tgc	cgc	atg	ctt	ctg	487	
Ala	Lys	Val	Lys	Leu	Tyr	Gly	Ser	Asp	Lys	Ser	Cys	Arg	Met	Leu	Leu		
135					140					145					150		
ctc	atc	ggg	gcc	tcg	tgg	ctc	atc	tcg	ctg	gtc	ctc	ggg	ggc	ctg	ccc	535	
Leu	Ile	Gly	Ala	Ser	Trp	Leu	Ile	Ser	Leu	Val	Leu	Gly	Gly	Leu	Pro		
			155						160					165			

atc ctt ggc tgg aac tgc ctg ggc cac ctc gag gcc tgc tcc act gtc 583  
 Ile Leu Gly Trp Asn Cys Leu Gly His Leu Glu Ala Cys Ser Thr Val  
 170 175 180

ctg cct ctc tac gcc aag cat tat gtg ctg tgc gtg gtg acc atc ttc 631  
 Leu Pro Leu Tyr Ala Lys His Tyr Val Leu Cys Val Val Thr Ile Phe  
 185 190 195

tcc atc atc ctg ttg gcc atc gtg gcc ctg tac gtg cgc atc tac tgc 679  
 Ser Ile Ile Leu Leu Ala Ile Val Ala Leu Tyr Val Arg Ile Tyr Cys  
 200 205 210

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gtg gtc cgc tca agc cac gct gac atg gcc gcc ccg cag acg cta gcc 727  
 Val Val Arg Ser Ser His Ala Asp Met Ala Ala Pro Gln Thr Leu Ala  
 215 220 225 230

ctg ctc aag acg gtc acc atc gtg cta ggc gtc ttt atc gtc tgc tgg 775  
 Leu Leu Lys Thr Val Thr Ile Val Leu Gly Val Phe Ile Val Cys Trp  
 235 240 245

ctg ccc gcc ttc agc atc ctc ctt ctg gac tat gcc tgt ccc gtc cac 823  
 Leu Pro Ala Phe Ser Ile Leu Leu Leu Asp Tyr Ala Cys Pro Val His  
 250 255 260

tcc tgc ccg atc ctc tac aaa gcc cac tac ytt ttc gcc gtc tcc acc 871  
 Ser Cys Pro Ile Leu Tyr Lys Ala His Tyr Xaa Phe Ala Val Ser Thr  
 265 270 275

ctg aat tcc ctg ctc aac ccc gtc atc tac acg tgg cgc agc cgg gac 919  
 Leu Asn Ser Leu Leu Asn Pro Val Ile Tyr Thr Trp Arg Ser Arg Asp  
 280 285 290

ctg cgg cgg gag gtg ctt cgg ccg ctg cag tgc tgg cgg ccg ggg gtg 967  
 Leu Arg Arg Glu Val Leu Arg Pro Leu Gln Cys Trp Arg Pro Gly Val  
 295 300 305 310

ggg gtg caa gga cgg agg cgg ggc ggg acc ccg ggc cac cac ctc ctg 1015  
 Gly Val Gln Gly Arg Arg Arg Gly Gly Thr Pro Gly His His Leu Leu  
 315 320 325

cca ctc cgc agc tcc agc tcc ctg gag agg ggc atg cac atg ccc acg 1063  
 Pro Leu Arg Ser Ser Ser Leu Glu Arg Gly Met His Met Pro Thr  
 330 335 340

tca ccc acg ttt ctg gag ggc aac acg gtg gtc tgagggtggg ggtggaccaa 1116  
 Ser Pro Thr Phe Leu Glu Gly Asn Thr Val Val  
 345 350

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&lt;210&gt; 17

&lt;211&gt; 353

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; MOD\_RES

&lt;222&gt; (273)

&lt;223&gt; Leu or Phe

&lt;400&gt; 17

Met Gly Ser Leu Tyr Ser Glu Tyr Leu Asn Pro Asn Lys Val Gln Glu  
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His Tyr Asn Tyr Thr Lys Glu Thr Leu Glu Thr Gln Glu Thr Thr Ser  
 20 25 30

Arg Gln Val Ala Ser Ala Phe Ile Val Ile Leu Cys Cys Ala Ile Val  
 35 40 45

Val Glu Asn Leu Leu Val Leu Ile Ala Val Ala Arg Asn Ser Lys Phe  
 50 55 60

His Ser Ala Met Tyr Leu Phe Leu Gly Asn Leu Ala Ala Ser Asp Leu  
 65 70 75 80

Leu Ala Gly Val Ala Phe Val Ala Asn Thr Leu Leu Ser Gly Ser Val  
 85 90 95

Thr Leu Arg Leu Thr Pro Val Gln Trp Phe Ala Arg Glu Gly Ser Ala  
 100 105 110

Phe Ile Thr Leu Ser Ala Ser Val Phe Ser Leu Leu Ala Ile Ala Ile  
 115 120 125

Glu Arg His Val Ala Ile Ala Lys Val Lys Leu Tyr Gly Ser Asp Lys  
 130 135 140

Ser Cys Arg Met Leu Leu Leu Ile Gly Ala Ser Trp Leu Ile Ser Leu  
 145 150 155 160

Val Leu Gly Gly Leu Pro Ile Leu Gly Trp Asn Cys Leu Gly His Leu  
 165 170 175

Glu Ala Cys Ser Thr Val Leu Pro Leu Tyr Ala Lys His Tyr Val Leu  
 180 185 190

Cys Val Val Thr Ile Phe Ser Ile Ile Leu Leu Ala Ile Val Ala Leu  
 195 200 205

Tyr Val Arg Ile Tyr Cys Val Val Arg Ser Ser His Ala Asp Met Ala  
 210 215 220

Ala Pro Gln Thr Leu Ala Leu Leu Lys Thr Val Thr Ile Val Leu Gly  
 225 230 235 240

Val Phe Ile Val Cys Trp Leu Pro Ala Phe Ser Ile Leu Leu Leu Asp  
 245 250 255

Tyr Ala Cys Pro Val His Ser Cys Pro Ile Leu Tyr Lys Ala His Tyr  
 260 265 270

Xaa Phe Ala Val Ser Thr Leu Asn Ser Leu Leu Asn Pro Val Ile Tyr  
275 280 285

Thr Trp Arg Ser Arg Asp Leu Arg Arg Glu Val Leu Arg Pro Leu Gln  
290 295 300

Cys Trp Arg Pro Gly Val Gly Val Gln Gly Arg Arg Arg Gly Gly Thr  
305 310 315 320

Pro Gly His His Leu Leu Pro Leu Arg Ser Ser Ser Ser Leu Glu Arg  
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Gly Met His Met Pro Thr Ser Pro Thr Phe Leu Glu Gly Asn Thr Val  
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Val

<210> 18

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<210> 19

<211> 1062

<212> DNA

<213> Homo sapiens

<400> 19

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<210> 21

<211> 352

<212> PRT

<213> Rattus sp.

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Arg Lys Val Ala Ser Ala Phe Ile Ile Ile Leu Cys Cys Ala Ile Val  
 35 40 45

Val Glu Asn Leu Leu Val Leu Ile Ala Val Ala Arg Asn Ser Lys Phe  
 50 55 60

His Ser Ala Met Tyr Leu Phe Leu Gly Asn Leu Ala Ala Ser Asp Leu  
 65 70 75 80

Leu Ala Gly Val Ala Phe Val Ala Asn Thr Leu Leu Ser Gly Pro Val  
 85 90 95

Thr Leu Ser Leu Thr Pro Leu Gln Trp Phe Ala Arg Glu Gly Ser Ala  
 100 105 110

Phe Ile Thr Leu Ser Ala Ser Val Phe Ser Leu Leu Ala Ile Ala Ile  
 115 120 125

Glu Arg Gln Val Ala Ile Ala Lys Val Lys Leu Tyr Gly Ser Asp Lys  
 130 135 140

Ser Cys Arg Met Leu Met Leu Ile Gly Ala Ser Trp Leu Ile Ser Leu  
 145 150 155 160

Ile Leu Gly Gly Leu Pro Ile Leu Gly Trp Asn Cys Leu Asp His Leu  
 165 170 175

Glu Ala Cys Ser Thr Val Leu Pro Leu Tyr Ala Lys His Tyr Val Leu  
 180 185 190

Cys Val Val Thr Ile Phe Ser Val Ile Leu Leu Ala Ile Val Ala Leu  
 195 200 205

Tyr Val Arg Ile Tyr Phe Val Val Arg Ser Ser His Ala Asp Val Ala  
 210 215 220

Gly Pro Gln Thr Leu Ala Leu Leu Lys Thr Val Thr Ile Val Leu Gly  
 225 230 235 240

Val Phe Ile Ile Cys Trp Leu Pro Ala Phe Ser Ile Leu Leu Leu Asp  
 245 250 255

Ser Thr Cys Pro Val Arg Ala Cys Pro Val Leu Tyr Lys Ala His Tyr  
 260 265 270

Phe Phe Ala Phe Ala Thr Leu Asn Ser Leu Leu Asn Pro Val Ile Tyr  
 275 280 285

Thr Trp Arg Ser Arg Asp Leu Arg Arg Glu Val Leu Arg Pro Leu Leu  
 290 295 300

Cys Trp Arg Gln Gly Lys Gly Ala Thr Gly Arg Arg Gly Gly Asn Pro  
305 310 315 320

Gly His Arg Leu Leu Pro Leu Arg Ser Ser Ser Ser Leu Glu Arg Gly  
325 330 335

Leu His Met Pro Thr Ser Pro Thr Phe Leu Glu Gly Asn Thr Val Val  
340 345 350

<210> 22

<211> 353

<212> PRT

<213> Homo sapiens

<400> 22

Met Gly Ser Leu Tyr Ser Glu Tyr Leu Asn Pro Asn Lys Val Gln Glu  
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His Tyr Asn Tyr Thr Lys Glu Thr Leu Glu Thr Gln Glu Thr Thr Ser  
20 25 30

Arg Gln Val Ala Ser Ala Phe Ile Val Ile Leu Cys Cys Ala Ile Val  
35 40 45

Val Glu Asn Leu Leu Val Leu Ile Ala Val Ala Arg Asn Ser Lys Phe  
50 55 60

His Ser Ala Met Tyr Leu Phe Leu Gly Asn Leu Ala Ala Ser Asp Leu  
65 70 75 80

Leu Ala Gly Val Ala Phe Val Ala Asn Thr Leu Leu Ser Gly Ser Val  
85 90 95

Thr Leu Arg Leu Thr Pro Val Gln Trp Phe Ala Arg Glu Gly Ser Ala  
100 105 110

Phe Ile Thr Leu Ser Ala Ser Val Phe Ser Leu Leu Ala Ile Ala Ile  
115 120 125

Glu Arg His Val Ala Ile Ala Lys Val Lys Leu Tyr Gly Ser Asp Lys  
130 135 140

Ser Cys Arg Met Leu Leu Leu Ile Gly Ala Ser Trp Leu Ile Ser Leu  
145 150 155 160

Val Leu Gly Gly Leu Pro Ile Leu Gly Trp Asn Cys Leu Gly His Leu  
165 170 175

Glu Ala Cys Ser Thr Val Leu Pro Leu Tyr Ala Lys His Tyr Val Leu  
180 185 190

Cys Val Val Thr Ile Phe Ser Ile Ile Leu Leu Ala Val Val Ala Leu  
195 200 205

Tyr Val Arg Ile Tyr Cys Val Val Arg Ser Ser His Ala Asp Met Ala  
210 215 220

Ala Pro Gln Thr Leu Ala Leu Leu Lys Thr Val Thr Ile Val Leu Gly  
225 230 235 240

Val Phe Ile Val Cys Trp Leu Pro Ala Phe Ser Ile Leu Leu Leu Asp  
245 250 255

Tyr Ala Cys Pro Val His Ser Cys Pro Ile Leu Tyr Lys Ala His Tyr  
260 265 270

Leu Phe Ala Val Ser Thr Leu Asn Ser Leu Leu Asn Pro Val Ile Tyr  
275 280 285

Thr Trp Arg Ser Arg Asp Leu Arg Arg Glu Val Leu Arg Pro Leu Gln  
290 295 300

Cys Trp Arg Pro Gly Val Gly Val Gln Gly Arg Arg Arg Gly Gly Thr  
305 310 315 320

Pro Gly His His Leu Leu Pro Leu Arg Ser Ser Ser Ser Leu Glu Arg  
325 330 335

Gly Met His Met Pro Thr Ser Pro Thr Phe Leu Glu Gly Asn Thr Val  
340 345 350

Val

<210> 23

<211> 351

<212> PRT

<213> Homo sapiens

<400> 23

Met Val Ile Met Gly Gln Cys Tyr Tyr Asn Glu Thr Ile Gly Phe Phe  
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Tyr Asn Asn Ser Gly Lys Glu Leu Ser Ser His Trp Arg Pro Lys Asp  
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Val Val Val Val Ala Leu Gly Leu Thr Val Ser Val Leu Val Leu Leu  
35 40 45

Thr Asn Leu Leu Val Ile Ala Ala Ile Ala Ser Asn Arg Arg Phe His  
50 55 60

Gln Pro Ile Tyr Tyr Leu Leu Gly Asn Leu Ala Ala Ala Asp Leu Phe  
65 70 75 80

Ala Gly Val Ala Tyr Leu Phe Leu Met Phe His Thr Gly Pro Arg Thr  
85 90 95

Ala Arg Leu Ser Leu Glu Gly Trp Phe Leu Arg Gln Gly Leu Leu Asp  
100 105 110

Thr Ser Leu Thr Ala Ser Val Ala Thr Leu Leu Ala Ile Ala Val Glu  
115 120 125

Arg His Arg Ser Val Met Ala Val Gln Leu His Ser Arg Leu Pro Arg  
 130 135 140  
 Gly Arg Val Val Met Leu Ile Val Gly Val Trp Val Ala Ala Leu Gly  
 145 150 155 160  
 Leu Gly Leu Leu Pro Ala His Ser Trp His Cys Leu Cys Ala Leu Asp  
 165 170 175  
 Arg Cys Ser Arg Met Ala Pro Leu Leu Ser Arg Ser Tyr Leu Ala Val  
 180 185 190  
 Trp Ala Leu Ser Ser Leu Leu Val Phe Leu Leu Met Val Ala Val Tyr  
 195 200 205  
 Thr Arg Ile Phe Phe Tyr Val Arg Arg Arg Val Gln Arg Met Ala Glu  
 210 215 220  
 His Val Ser Cys His Pro Arg Tyr Arg Glu Thr Thr Leu Ser Leu Val  
 225 230 235 240  
 Lys Thr Val Val Ile Ile Leu Gly Ala Phe Val Val Cys Trp Thr Pro  
 245 250 255  
 Gly Gln Val Val Leu Leu Leu Asp Gly Leu Gly Cys Glu Ser Cys Asn  
 260 265 270  
 Val Leu Ala Val Glu Lys Tyr Phe Leu Leu Leu Ala Glu Ala Asn Ser  
 275 280 285  
 Leu Val Asn Ala Ala Val Tyr Ser Cys Arg Asp Ala Glu Met Arg Arg  
 290 295 300  
 Thr Phe Arg Arg Leu Leu Cys Cys Ala Cys Leu Arg Gln Ser Thr Arg  
 305 310 315 320  
 Glu Ser Val His Tyr Thr Ser Ser Ala Gln Gly Gly Ala Ser Thr Arg  
 325 330 335  
 Ile Met Leu Pro Glu Asn Gly His Pro Leu Met Asp Ser Thr Leu  
 340 345 350

&lt;210&gt; 24

&lt;211&gt; 1056

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 24

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 cgccgcttcc accagcccat ctactacctg ctcggcaatc tggccgcggc tgacctcttc 240  
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